Amendments to the Claims:

1. (currently amended) A computer-readable medium [[(500)]] having embodied thereon a computer program [[(501)]] for [[the]] non-invasive quantitative assessment of cardiac perfusion from a series of cardiac images comprising image segments, said computer program ~~being~~ for processing by a computer [[(50)]], said computer program comprising

a first code segment [[(73)]] selecting at least one image segment with normal perfusion, such that cardiac perfusion parameters of the remaining image segments are based on a perfusion parameter of said at least one image segment having normal perfusion.

2. (currently amended) The computer-readable medium according to claim 1, further comprising

a second code segment [[(70)]] dividing a myocardium depicted on said cardiac image series into said image segments,

a third code segment [[(71)]] determining a time-intensity profile for distribution of a contrast agent in said myocardium for each of said image segments,

a fourth code segment [[(72)]] determining said perfusion parameter for each of said time-intensity profiles of said image segments,

a fifth code segment [[(73)]] deriving a normal perfusion parameter from said at least one image segment having normal perfusion, and

a sixth code segment [[(75)]] calculating a relative perfusion parameter for each of said segments with relation to said normal perfusion parameter.

3. (currently amended) The computer-readable medium according to claim 1, said computer program further comprising:

a code segment [[(76)]] for calculating a ratio of cardiac perfusion parameters derived at stress and cardiac perfusion parameters derived at rest for each image segment.

4. (original) The computer-readable medium according to claim 3, wherein said ratio of cardiac perfusion parameters is a myocardial perfusion reserve index (MPRI).

5. (original) The computer-readable medium according to claim 4, wherein said MPRI is calculated from relative maximum upslopes derived at rest and at stress.

6. (original) The computer-readable medium according to claim 3, wherein said ratio of cardiac perfusion parameters is a thresholded MPRI being calculated by thresholding a ratio calculated from relative maximum upslopes derived at rest and at stress.

7. (previously presented) The computer-readable medium according to claim 1, wherein said perfusion parameter is used for visualizing insufficiently perfused myocardial areas comprising at least one of said image segments.

8. (currently amended) The computer-readable medium according to claim 1, wherein said first code segment ~~comprising~~ further comprises:

selecting an image segment with the highest perfusion parameter value of all image segments as the image segment having normal perfusion, wherein a high perfusion parameter value is defined as good perfusion.

9. (currently amended) The computer-readable medium according to claim 1, wherein said first code segment ~~comprising~~ further comprises:

selecting an average metric calculated from N image segments with the N highest perfusion parameter values, wherein N is an integer number significantly lower than the total number of image segments.

10. (currently amended) A ~~device (600) in particular a~~ workstation ~~being adapted~~ configured for [[the]] quantitative assessment of cardiac perfusion, said ~~apparatus~~ workstation comprising:

~~means for executing the computer program according to claim 1~~ a processor programmed to:

receive a series of cardiac images which carry perfusion information;

segmenting the cardiac images into a plurality of image segments;

determining a maximum upslope for each image segment;

identifying at least one image segment with a highest maximum upslope;

normalizing the maximum upslopes of the image segments in accordance with the highest maximum upslope to generate a cardiac perfusion parameter for each of the image segments;

a display unit which generates a display indicative of the generated cardiac perfusion parameters.

11. (currently amended) A method for [[the]] quantitative assessment of cardiac perfusion from a non-invasively captured cardiac series of cardiac images comprising image segments, said method comprising:

selecting at least one image segment with [[a]] normal perfusion[[,]];

determining relative ~~such that~~ cardiac perfusion parameters of the remaining image segments [[are]] based on a perfusion parameter of said image segment with normal perfusion.

12. (new) The computer-readable medium according to claim 1, wherein the at least one segment with normal perfusion ~~being~~ is chosen according to criteria including at least one of:

an image segment with a highest maximum upslope,

an average of N segments with the highest maximum upslope, where N is an integer greater than 1,

an average of N segments which both exceed a selected threshold and have the highest maximum upslope.

13. (new) The computer-readable medium according to claim 1, further including one or more code segments which:

determine a maximum upslope of the at least one selected image segment with normal perfusion;

determine a maximum upslope of image segments without normal perfusion; and

normalize the maximum upslope of the image segments without normal perfusion using the maximum upslope of the at least one image segment with normal perfusion.

14. (new) The computer-readable medium according to claim 13, wherein normalizing the maximum upslope of the image segments without normal perfusion includes:

determining relative maximum upslopes of the image segments without normal perfusion as a percentage of the maximum upslope of the at least one image segment with normal perfusion.

15. (new) The computer-readable medium according to claim 2, wherein the perfusion parameter is a maximum upslope and wherein the sixth code segment calculates the relative maximum upslope for each of the image segments as a percentage of the maximum upslope of the at least one image segment with normal perfusion.

16. (new) The workstation according to claim 10, wherein the one or more image segments with the highest maximum upslope are deemed to have normal perfusion and the normalizing includes:

determining relative maximum upslope for image segments without normal perfusion as a percentage of the maximum upslope of the at least one image segment with the highest maximum upslope.

17. (new) The method according to claim 11, wherein determining the relative cardiac perfusion parameters includes:

determining a perfusion parameter for each of the remaining image segments;

normalizing the determined perfusion parameter of each remaining segment with the perfusion parameter of the image segment with normal perfusion.

18. (new) The method according to claim 17, wherein the perfusion parameters include maximum upslopes.

19. (new) The method according to claim 17, wherein the relative cardiac perfusion parameters includes:

determining a maximum upslope for each of the remaining image segments;

determining a maximum upslope of the image segment with normal perfusion;

calculating the maximum upslope for each of the remaining image segments as a percentage of the upslope for the image segment with normal perfusion to generate the relative perfusion parameter.

20. (new) The method according to claim 11, further including:

at least one of storing the relative perfusion parameter and generating a display indicative of the relative perfusion parameter.